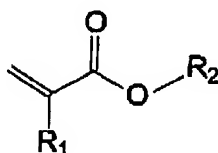


IN THE CLAIMS

Claim 1 (currently amended). A UV crosslinked pressure-sensitive adhesive composition comprising polymers, copolymers, or both, based at least predominantly on (meth)acrylic acid, derivatives thereof, or both, wherein said crosslinked pressure-sensitive adhesive composition comprises a residual volatile component fraction of in total less than 50 µg/g, as measured by the tesa method.

Claim 2 (currently amended). The UV crosslinked pressure-sensitive adhesive composition as claimed in claim 1, wherein the polymers, copolymers or both are prepared using at least the following monomers:

- (a) from 65 to 100% by weight of acrylic acid derivatives, methacrylic acid derivatives, or both, of the general formula



- where $R_1 = \text{H or CH}_3$ and $R_2 = \text{an alkyl chain of 2 to 20 carbon atoms,}$
- (b) from 0 to 35% by weight of vinyl compounds containing functional groups.

Claim 3 (currently amended). A process for preparing a UV crosslinked pressure-sensitive adhesive composition as claimed in claim 1, using a polyacrylate solution obtainable by free-radical addition polymerization, which comprises a concentration step in which

- ♦ after polymerization, an entrainer is added to the polyacrylate solution,
- ♦ the entrainer-admixed polyacrylate solution is passed into an extruder in which said solution is subjected to a carrier distillation,
- ♦ in at least one further step following concentration, a postpurification step is conducted by adding the same entrainer again, or a further entrainer, to the concentrated polyacrylate composition and carrying out a further carrier distillation in the extruder,
- ♦ the concentration thus produces a polyacrylate composition which is processed further from the melt, and
- ♦ the polyacrylate composition is crosslinked by exposure to UV-A radiation.

Claim 4 (canceled).

Claim 5 (currently amended). The process as claimed in claim 3 ~~or 4~~, wherein at least the extruder in the concentration step is a corotating or counterrotating twin-screw extruder.

Claim 6 (currently amended). The process as claimed in claim 3 ~~or 4~~, wherein steam is used as entrainer.

Claim 7 (currently amended). The process as claimed in claim 3 ~~or 4~~, wherein

- ♦ the concentrated polyacrylate composition is applied to a backing material
- ♦ and the polyacrylate composition on the backing material is subjected to a crosslinking reaction.

Claim 8 (previously presented). The process as claimed in claim 7, wherein crosslinking is carried out using UV light in a wavelength range from 250 to 400 nm, with the proviso that the output of light in the wavelength range from 300 to 400 nm makes up at least 70% of the total irradiated light output.

Claim 9 (currently amended). An adhesive tape comprising a backing material having a UV crosslinked pressure-sensitive adhesive composition as claimed in claim 1 or 2 applied to one or both sides.

Claim 10 (previously presented). The adhesive tape as claimed in claim 9, comprising a backing material having an outgassing tendency of less than 5 µg/g.

Claim 11 (currently amended). The UV crosslinked pressure-sensitive adhesive composition of claim 1, wherein said volatile component fraction is less than 10 µg/g.

Claim 12 (currently amended). The process of claim 3 ~~claim 4~~, wherein said further carrier distillation is conducted at higher temperatures and lower vacuums than the preceding distillation.

Claim 13 (previously presented). The process of claim 8, wherein the light in the wavelength range of 300 to 400 nm makes up at least 90% of the total irradiated light output.